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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,919	08/18/2006	Shinji Yamamoto	2946-204	1069

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EXAMINER	
CRAIG, DWIN M	

ART UNIT	PAPER NUMBER
2123	

NOTIFICATION DATE	DELIVERY MODE
04/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,919	YAMAMOTO ET AL.	
	Examiner	Art Unit	
	DWIN M. CRAIG	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6 and 8-12* is/are rejected.

7)☒ Claim(s) *3,7 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/16/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 have been presented for examination.

Priority

2. The Examiner acknowledges Applicants' claim of priority to a foreign priority date of 26th February 2004.

Specification

3. The disclosure is objected to because of the following informalities: In paragraph [0039] is the phrase "This process is a model a process in which a garment is expanded by putting a torso and arm therethrough when wearing the knit garment is caused to shrink to fit with the human body", This sentence is grammatically awkward and needs to be revised into idiomatic English. Further paragraph [0041] discloses, "...the detail of the yarn data is applied by a yarn model." The Examiner respectfully suggests that Applicants' intended to say, "...the detail of the yarn data is applied *to* a yarn model", *emphasis added*. Clarification and/or amendment is requested.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 9-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current claim language is directed towards teaching software disembodied from a machine or computer program product stored on a computer readable storage media. For example independent claim 9 discloses in the preamble of the claim,

"A program of simulating..." and then teaches, *a storing command* and then *a matching command* which is teaching a series of software commands that are neither tied to a machine, transforming any real-world data nor a computer program product stored on a computer readable storage media. Further and in regards to a computer readable storage media, it is noted by the Examiner that Applicants' specification fails to teach, disclose or provide a written description of a computer readable storage media that is clearly defined.

The MPEP clearly teaches that software listings and more specifically claims that describe *software alone and not tied to a machine or computer program product stored on a computer readable storage media that when executed by a processor perform method steps* are claims that are directed towards non-statutory subject matter.

See MPEP section 2106.01 specifically the section entitled, "FUNCTIONAL DESCRIPTIVE MATERIAL: "DATA STRUCTURES" REPRESENTING DESCRIPTIVE MATERIAL *PER SE* OR COMPUTER PROGRAMS REPRESENTING COMPUTER LISTINGS *PER SE*"

Claims 9-12 are rejected under 35 U.S.C. § 101 because all process claims ***must*** (1) be *"tied"* to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as article or materials) to a different state or thing. *See Diamond v. Diehr,* 450 U.S. 175, 184(1981); *Parker v. Flook,* 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson,* 409 U.S. 63, 70(1972); *Cochrane v. Deener,* 94 U.S. 780, 787-88 (1876).

As discussed above, the current claim language is not *tied* to a machine nor does it *transform* any real-world data and therefore the claims are directed towards non-statutory subject matter.

Comments regarding claims 1-8

As regards claims 1-8, the claims appear to be tied to a machine, specifically the machine disclosed in Figure 1 which is a general purpose computing system configured with software in a memory to cause a processor to perform the claimed method steps. Applicants' specification clearly states that an *actual garment* is not being processed but a *virtual garment* as expressly claimed is being processed in a general purpose computing system. While the computing system as disclosed in Figure 1 does not expressly disclose a *processor* an artisan of ordinary skill would see the described computing system as disclosed in Figure 1 and in combination with the description in the specification realize that a processor is inherent in the system of Figure 1 and therefore the claimed subject matter as disclosed in claims 1-8 are *tied* to a machine.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 2, 3, 5, 6, 8, 9, 10 and 12 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of U.S. Patent No. 7,379,786. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the language of the instant claims is not identical to the language of the claims in U.S. Pat. '786 it would have been obvious to an artisan of ordinary skill to modify the language of claims 1-6 of U.S. Pat.'786 to derive the instant claims as presented. More specifically and using independent claim 1 of each case as an example; both claims teach a simulated human model with polygons and a plurality of axis and a simulated knit garment which is placed on the simulated human model and then shrunk or expanded to fit said model, also and further including a wearing of the knit garment outside the human model, see dependent claim 3 of U.S. Pat. '786.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 2, 4, 5, 6, 8, 9, 10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,968,297 to Ziakovic et al.

6.1 As regards independent claims 1, 5 and 9 and using claim 1 as an example, *Ziakovic* discloses, *a method for simulating wearing of a knit garment on a human model, the knit garment being a virtual knit garment and having a plurality of parts,* (see Figures 1-9A and as regards a teaching of a *virtual dummy* see Col. 2 lines 38-43, more specifically "…The invention provides a method of viewing a garment made up of garment pieces on a virtual dummy…" a virtual dummy is the same as a *human model*) *the human model being a three-dimensional human model and comprising a plurality of polygons* (see Figure 16 and Col. 6 lines 44-48 more specifically, "the surface resulting from the accumulation of convex polygons…"), *the method comprising the steps of: providing the human model with a plurality of axes* (Figure 8 and the descriptive text)*; matching each of the parts of the knit garment with any of the plurality of axes* (see Col. 4 lines 1-3, placing is functionally the same as matching, see also Col. 7 lines 6-12 not the discussion regarding *point-to-point relationship between the surface of the dummy and the piece* of fabric) *and temporarily positioning the knit garment with respect to the human model; and shrinking/expanding the temporarily positioned knit garment toward the axis matched with each of the parts of the knit garment in a peripheral direction to obtain a natural size of each of the parts, whereby the knit garment is worn on the human model so that each of the parts appears outside the human model* (see the discussion of deformation and fitting of the knit garment to the model in Col. 9-14).

6.2 As regards claims 2, 6 and 10 and using claim 2 as an example, *Ziakovic* discloses *wherein: the human model comprises at least a torso and both arms, along with an axis of the torso, and axes of the right and left arms; the plurality of parts of the virtual knit garment comprises at least a body and sleeves, each of the parts is matched with any of the axes of the human model, and the temporal positioning is performed so that the axis matched with each of the parts passes through the inside of each of the parts; and both of the sleeves of the virtual garment are shrunk/expanded such that upper parts of the both sleeves contact with upper parts of the arms of the human model and spaces are provided at lower parts of the both sleeves with respect to the upper parts of the arms of the human model.* (see the discussion of deformation and fitting of the knit garment to the model in Col. 9-14 and Figures 3-18 and the descriptive text).

6.3 As regards claims 4, 8 and 12 and using claim 4 as an example, , *Ziakovic* discloses *wherein after wearing the knit garment, each of stitches of the knit garment is moved close to a mean position of surrounding stitches, whereby positions of the stitches of the knit garment are smoothed, and the smoothing is repeatedly performed.* (see the discussion of deformation and fitting of the knit garment to the model in Col. 9-14 and Figures 3-18 and the descriptive text).

Allowable Subject Matter

7. Claims 3, 7 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: While Ziakovic teaches stretching a knit garment on a virtual model and U.S. Patent 5,615,318 to Matsuura teaches visualizing sewing patterns on a virtual sewing dummy, see Figures 7-28 and the descriptive text, **none of these references either alone or in combination with the prior art of record disclose** wherein after wearing the virtual knit garment on the human model, each stitch of the virtual knit garment is rearranged along a course direction and a wale direction of the virtual knit garment, whereby distortions between parts having different matching axes on the virtual knit garment are removed, Specifically including:

(claim 3) "wherein after wearing the virtual knit garment on the human model, each stitch of the virtual knit garment is rearranged along a course direction and a wale direction of the virtual knit garment, whereby distortions between parts having different matching axes on the virtual knit garment are removed.",

(claim 7) "after wearing the virtual knit garment on the human model, rearranging stitches along a course direction and a wale direction of the virtual knit garment to remove distortions between parts having different matching axes on the virtual knit garment.",

(claim 11) "after wearing the virtual knit garment on the human model, rearranging stitches along a course direction and a wale direction of the virtual knit garment to remove distortions between parts having different matching axes on the virtual knit garment." **In combination with all of the claimed limitations and features from which this claim depends.**

7.1 It is noted that claim 11 is being rejected under 35 U.S.C. 101, see above.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DWIN M. CRAIG whose telephone number is (571)272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dwin M Craig/
Examiner, Art Unit 2123